

AMENDMENT UNDER 37 C.F.R. § 1.111

US Application No: 10/710,482

Attorney Docket No. 6629C01\USA\PDC\ORBOT\OR

REMARKSGeneral remarks.

Claims 1-15 are all the claims pending in the application.

Applicant respectfully requests the Examiner to withdraw the objection to claim 4 in view of the self-explanatory amendments shown above. The claim has not been narrowed.

Rejections over Ando.

Claim 1 stands rejected as being anticipated by Ando. Ando does not teach or suggest “detecting signals generated from an interaction between the plurality of multiple beams and an inspected object.” In rejecting claim 1, the Examiner interpreted the light reflected from the target as the plurality of multiple beams. The reflected light, however, does not interact with any inspected object. Since the Examiner interpreted the reflected light as the plurality of multiple beams, and since the reflected light does not have any interaction with any inspected object, Ando cannot not meet the requirement for detecting signals generated from an interaction between the plurality of multiple beams and an inspected object. Applicant therefore respectfully requests the Examiner to withdraw this rejection of claim 1.

Claim 2 stands rejected as being anticipated by Ando. Claim 2 requires “detecting light scattered from the target.” In Ando, the only light detected is light reflected from the target. Ando lacks any teaching or suggestion of detecting light scattered from the target, and thus cannot anticipate claim 2. Applicant thus respectfully requests the Examiner to withdraw this rejection of claim 2, and also its dependent claims 3, 4, and 6.

Claim 11 stands rejected as being anticipated by Ando. Claim 11 requires “directing captured light to a detector through a confocal optical arrangement.” In rejecting this claim, the Examiner asserted that elements 124, 126, and 128 of Ando constitute a confocal arrangement. Elements 124 and 126, however, are a focus lens and a cylindrical lens, respectively. The Examiner may have mistaken element 128 as an aperture that may indicate a confocal arrangement. Element 128, however, is a photodetector and not an aperture. Elements 124, 126,

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and 128 thus lack any feature that an artisan of ordinary skill would understand to be a confocal optical arrangement. Since claim 11 requires directing captured light to a detector through a confocal optical arrangement, and since Ando lacks any teaching or suggestion of a confocal optical arrangement, Ando does not anticipate claim 11. Applicant therefore respectfully requests the Examiner to withdraw this rejection of claim 11 and also its dependent claim 12.

Rejections over Hill

Claim 7 stands rejected as being anticipated by Hill. Claim 7 requires "producing multiple beams of substantially identical intensity from the scanned single beam." In making this rejection, the Examiner asserted that Hill teaches this requirement in col. 3, lines 10-14:

In general, in another aspect, the invention features an interferometry system including an interferometer, a control circuit, and an angle measurement system. During operation the interferometer directs a measurement beam along a measurement path contacting a measurement object, separates the measurement beam into m portions, e.g., where m is one of 2 and 3, and recombines ...

The foregoing teachings of Hill lack the scanned single beam, and also the producing of multiple beams from the scanned single beam. The Hill beam that is separated into m portions is merely a projected beam that is static and not scanned. Since claim 7 requires producing multiple beams of substantially identical intensity from the scanned single beam, and since Hill teaches producing multiple beams from only a beam that is not a scanned single beam, Hill does not anticipate claim 7 under 35 U.S.C. § 102. Applicant therefore respectfully requests the Examiner to withdraw this rejection of independent claim 7.

The Examiner rejected claim 9 as being anticipated by Hill. Claim 9 requires "scanning the beam in a beam spot across a target ... wherein the beam has a scanning direction not perpendicular to the target movement direction." Hill does not teach or suggest, in its interferometry systems, scanning the beam in a beam spot across a target movable in a target

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movement direction. Therefore, Hill does not anticipate claim 9. Applicant therefore respectfully requests the Examiner to withdraw this rejection of claim 9 and its dependent claim 10.

The Examiner rejected claim 13 as being anticipated by Hill. Claim 13 requires illuminating through an objective lens and collecting with the objective lens. The passage of Hill relied on by the Examiner does not meet this requirement. The Examiner appears to have taken elements 143 or 156 in Fig. 2 as an objective lens. There is no objective lens in Fig. 2 to meet the requirements of claim 13. Moreover, there are no scanned beams in the passage of Hill relied upon by the Examiner. Applicant thus respectfully submits that Hill does not anticipate claim 13, and respectfully requests the Examiner to withdraw this rejection.

Rejection over Hill and Tanitsu

The Examiner rejected claim 8 (i.e., 8/7) under 35 U.S.C. §103(a) as being unpatentable over Hill in view of Tanitsu. Applicant has already pointed out that Hill is deficient with respect to independent claim 7. Tanitsu does not compensate for the above-identified deficiency of Hill. Even taken for what they would have meant as a whole to an artisan of ordinary skill, the combined teachings of Hill and Tanitsu would not have (and could not have) led an artisan of ordinary skill to produce the subject matter of independent claim 7, much less its dependent claim 8. Applicant thus respectfully requests the Examiner withdraw this rejection of claim 8.

Claims indicated as being allowable.

Applicant thanks the Examiner for indicating the presence of allowable subject matter in claims 5, 14, and 15. Even so, Applicant makes the following comments on the Examiner's Statement of Reasons for Allowance.

The Examiner's Statement of Reasons for Allowance highlights only certain features of the claims indicated as having allowable subject matter, but ignores other features that also provide a separate basis for patentability over the prior art. Applicant believes the Examiner's Statement of Reasons for Allowance unintentionally mischaracterizes what the prior art teaches, and that what the Examiner indicates as being shown in the prior art is not fully supported by the

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prior art of record. The claims have been written so as to define an invention that, as a whole, patentably distinguishes over the prior art, and the claims should not be interpreted as being limited by the Examiner's Statement of Reasons for Allowance.

Since claim 5 depends from other claims that patentably distinguish over the prior art, Applicant holds in abeyance the rewriting of the claim into independent form.

Conclusion and request for telephone interview.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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